

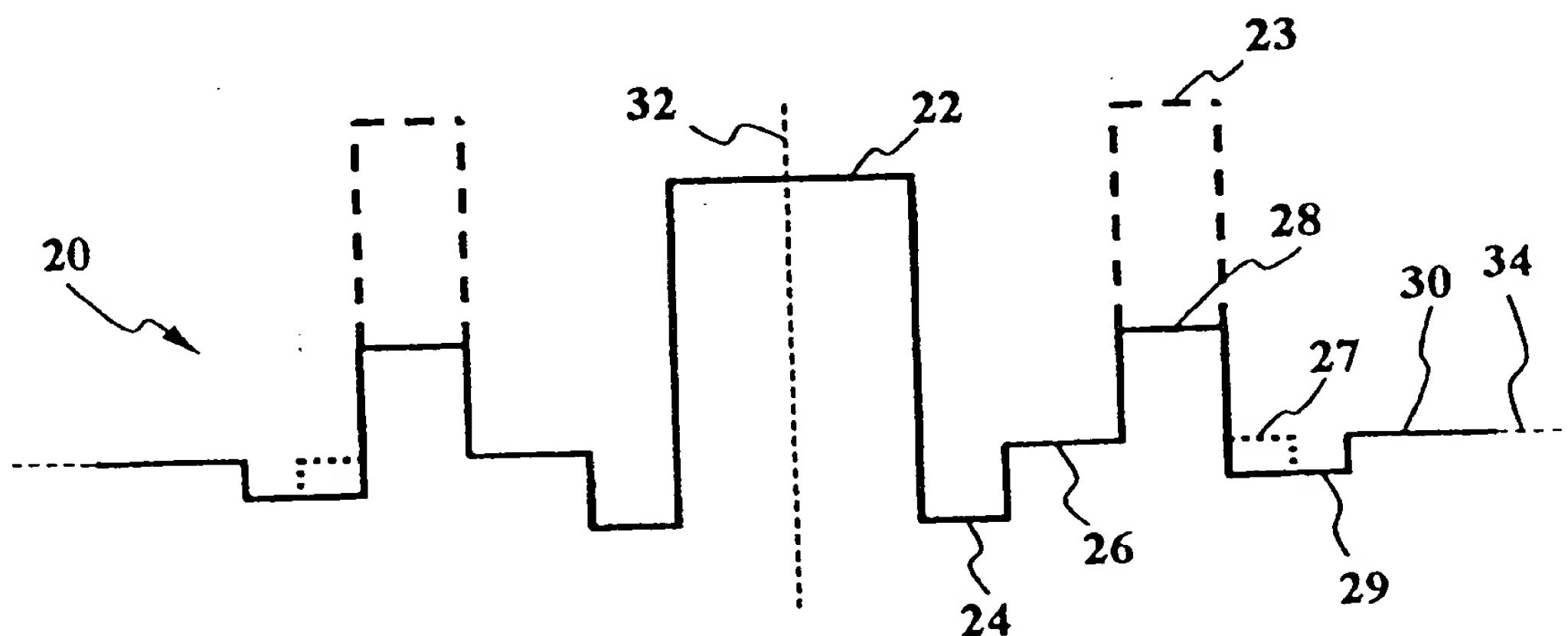
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<p>(21) International Application Number: PCT/EP99/06958</p> <p>(22) International Filing Date: 21 September 1999 (21.09.99)</p> <p>(30) Priority Data: 98117828.8 21 September 1998 (21.09.98) EP 60/104,636 16 October 1998 (16.10.98) US</p> <p>(71) Applicant (for all designated States except US): PIRELLI CAVI E SISTEMI S.P.A. [IT/IT]; Viale Sarca, 222, I-20126 Milano (IT).</p> <p>(72) Inventor; and (75) Inventor/Applicant (for US only): TIRLONI, Bartolomeo, Italo [IT/IT]; Via del Cornone, 4, I-24020 Scanzorosciate (IT).</p> <p>(74) Common Representative: PIRELLI CAVI E SISTEMI S.P.A.; Viale Sarca, 222, I-20126 Milano (IT).</p>		<p>(81) Designated States: AE, AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, ZA, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p>

(54) Title: OPTICAL FIBER FOR EXTENDED WAVELENGTH BAND



(57) Abstract

An optical transmission fiber for use in a wavelength division multiplexing transmission system is disclosed. The transmission fiber includes an inner core surrounded by a first, second and at least a third glass layer along the length of the fiber. The first glass layer has a depressed refractive-index difference and the second glass layer has a refractive-index difference of substantially zero. The third glass layer has a positive refractive-index difference. The fiber has an improved relationship between dispersion slope and depressed profile volume. The fiber can have a dispersion value of at least 1.5 ps/nm/km and a dispersion slope of less than about 0.07 ps/nm²/km over an extended range of carrier wavelengths for the transmission system, such as the range 1450-1650 nm.